
ZEBRA MUSSEL INFESTATION REPORT: FISH LAKE, HENNEPIN COUNTY

MnDNR – Division of Ecological and Water Resources - Invasive Species Program

Lake: Fish (27011800)

County: Hennepin

Type of report: Zebra mussel - new infestation

Date of report: 10/20/2022

Author[s] of report: April Londo and Three Rivers Park District (3RPD)

Date of inspection: 10/6/2022

Survey methods: SCUBA

Results: **36 ADULT ZEBRA MUSSELS FOUND**

Observers: A. Londo, K. Castillo and C. Wagner

Summary: On September 29, 2022 during a routine sampler plate check seasonal Three Rivers Park District (3RPD) staff collected one adult (8mm) zebra mussel (see photo 1 and 2). Sampler plate was located near the southern public access in Fish Lake, Hennepin County (27011800). Photo was submitted to the MnDNR the same day as collection.

On October 6, 2022, an early detection rapid response effort was taken by MnDNR and 3RPD staff to survey Fish Lake. Methods used included self-contained underwater breathing apparatus (SCUBA), wading and the use of a fieldmaster AquaVue tube (see photo 3). Four additional survey sites were visited prioritizing areas of suitable zebra mussel habitat throughout the lake (see map 1). Water clarity at time of search was approximately 5-7 feet. The survey crew found juvenile and adults zebra mussels at each site except one totaling over 30 zebra mussels and approximately 3 total search hours. The adult zebra mussels ranged in size from 5-12 mm in shell length (see photo 4). Friday October 7th, 3RPD staff conducted a more thorough search of the access area (point 5) and did not observed additional zebra mussels.

Three veliger vertical tows were taken using a 30 cm diameter, 80um mesh net (see map). The samples were processed on October 18, 2022 and although timing for zebra mussel reproduction was not ideal all sample yielded veligers. Zebra mussel reproduction in central Minnesota lakes is peak from mid-June through late July then tapering off in August. Site 1 was directly across from the initial observation and had the most veligers (200; see map 1).

Fish Lake in Hennepin County will be added to the Designated Infested Waters list as infested with zebra mussels and reported in EDDMaps Record ID 10704901.



Photo 1. MnDNR divers preparing for dive at second search site.

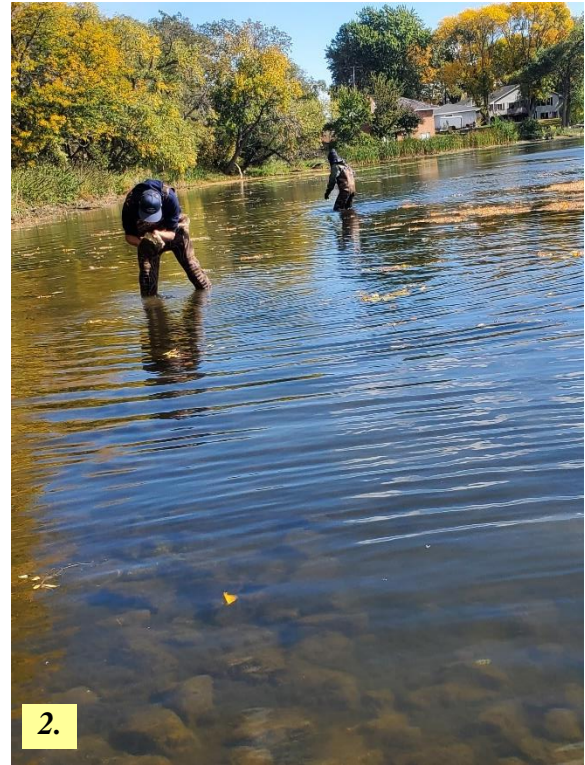
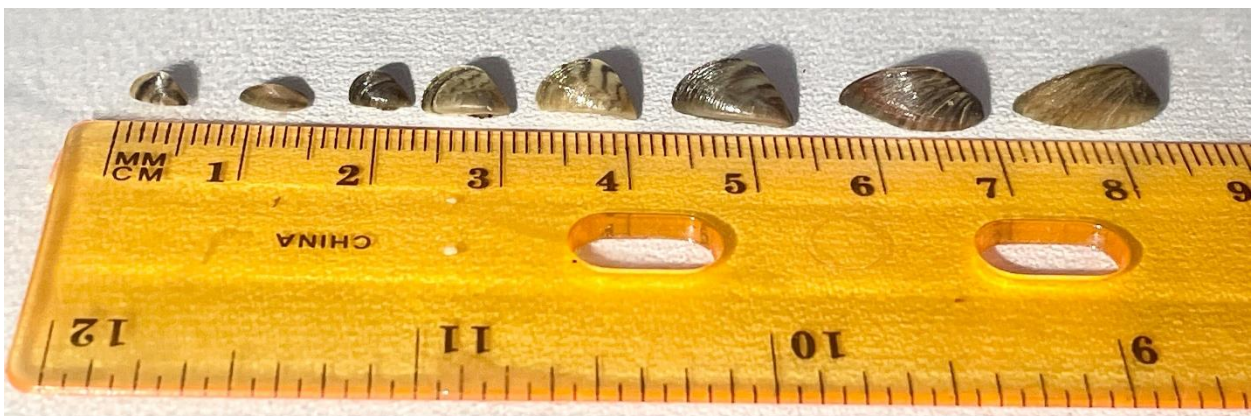


Photo 2. 3RPD searching shoreline rocky area for zebra mussels in Fish Lake, Hennepin County



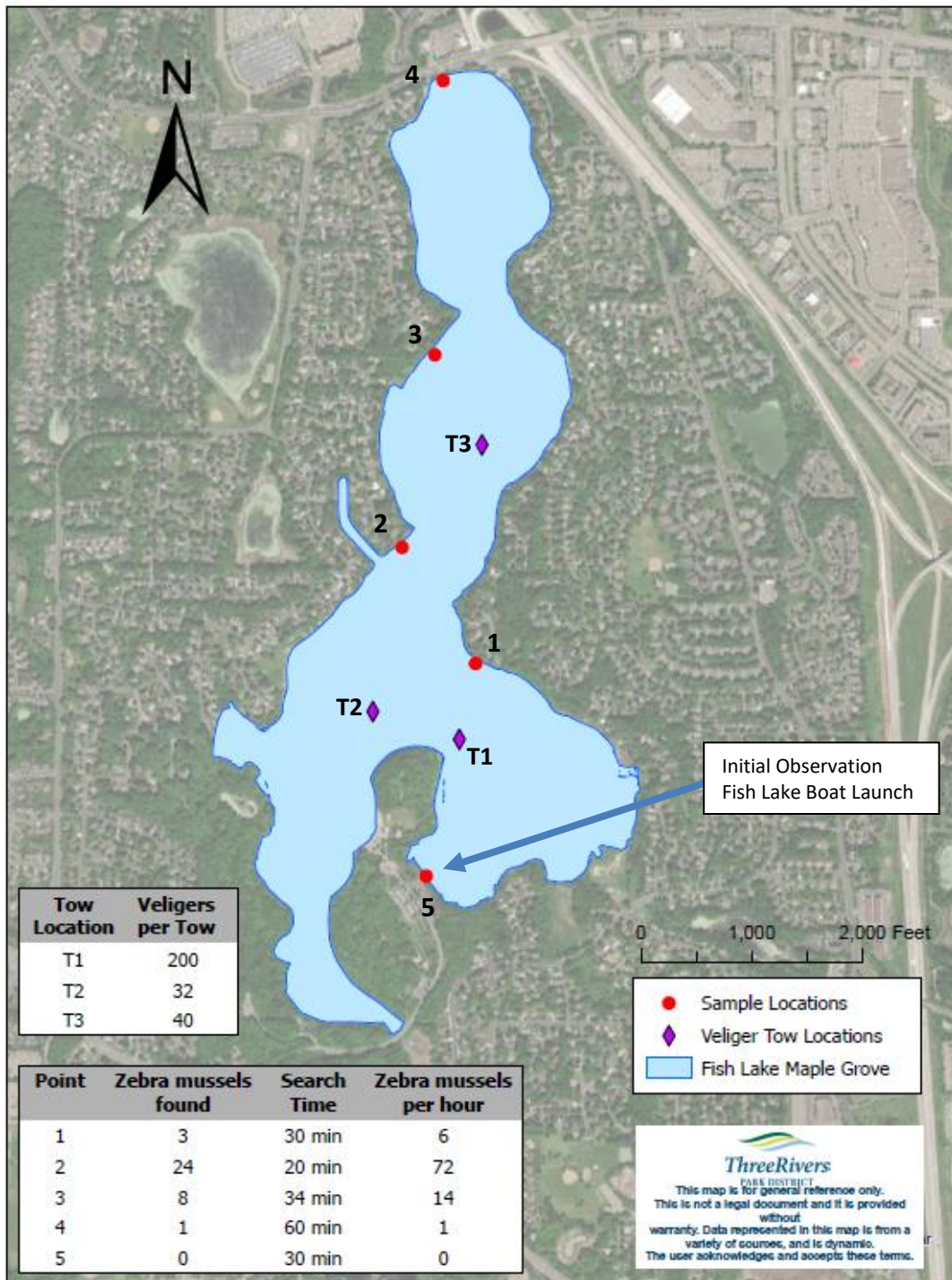
Photo 3. Initial adult zebra mussel measuring at 8mm. Zebra mussel was attached to a settlement plate near the public access. Observation made by 3RPD staff

Photo 2. Adult and juvenile zebra mussels collected during the October 6, 2022 survey ranging in size from 5- 12 mm. Photo taken by MnDNR staff. Zebra mussels collected from Fish Lake in Hennepin County



Fish Lake Zebra Mussel Survey

Completed 10/6/2022 by TRPD and DNR staff



Map 1. Map of zebra mussel search locations. In total the search effort in Fish Lake was approximately 3 hours resulting in 36 confirmed zebra mussels. Initial observation (point 5) was on September 23, 2022 and sampling was repeated on October 5th along with point 1-4. Three veliger tows (purple diamonds) were collected resulting in 272 total veligers. Map created by 3RPD.